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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,949	04/22/2002	Hildegard Romer	WEI0033	2546

7590

09/23/2004

John F Hoffman
Baker & Daniels
Suite 800
111 East Wayne Street
Fort Wayne, IN 46802

EXAMINER

HUG, ERIC J

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/049,949	Applicant(s) ROMER ET AL.	
	Examiner Eric Hug	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2002 and 22 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pieper (US 4,004,902) in view of Mantesa (US 4,780,121).

Pieper discloses a method and device for dyeing glass. Disclosed are a glass melting furnace 15, followed by a heated passage having a vertical portion 1 with heating electrodes 8, 9, a horizontal portion 2, and a downward portion 4 with mechanical agitation, followed by a feeder 13 to a subsequent processing device (not shown). A color feeding device 10 is positioned above the space where the glass is heated by the electrodes (see Figure and column 3, lines 53-56), or may be positioned at the outlet of the melting furnace before the heated passage (see column 3, lines 18-23). The heated passage arrangement provides for strong swirling flow of molten glass. The position of the feeding device in the vicinity of the heated passage provides for good color mixing in a short period of time and allows for rapid color changeover (see e.g., column 4, lines 53-60). There may also be a plurality of dyeing cells arranged downstream of the melting furnace so that several colors can be produced at various points at the same time (see column 4, line 67 to column 5, line 10). Pieper discloses all the claimed elements, arrangements thereof,

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and method steps, except for the claimed skull device. Instead, Pieper utilizes the electrode heated passage described above.

Mantesa discloses a melting device 10 connected to a heated receiving vessel 12 (which completes the melting), a subsequent refining device 35 and an induction heating vessel 20 with short residence time positioned after the heating vessel but before the refining device. Column 3, line 44 to column 4, line 23 describes the induction heated vessel as being characteristic of a skull device; note particularly the frozen layer described in column 4, lines 13-23 which separates the molten material from the vessel walls. This induction heated vessel has a short residence time and high degree of mixing similar to the heated passage of Pieper. However, Mantesa teaches that the induction heated vessel provides several advantages over using devices heated with electrodes, e.g., that the glass melt does not come in contact with the heating source, shorter residence times, smaller vessel, etc. See column 1, lines 12-18 and 36-38, column 2, lines 8-27. Therefore, at the time of the invention, it would have been obvious to one skilled in the art to substitute the heated passage of Peiper with the induction heating vessel, i.e., skull device, of Mantesa to obtain the aforementioned advantages thereof.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tiilikka (US 4,427,429) teaches adding color to molten glass between a furnace and subsequent heating step (column 1, lines 33-49).

Binder et al (US 5,268,925) discloses a U-shaped skull device.

Argent et al (US 5,588,978) discloses a process for coloring glass utilizing one or more transport channels between a melting furnace and a color treatment chamber.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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